

OLDEST BEE PAPER  
IN AMERICA

THE AMERICAN  
BEE JOURNAL

ESTABLISHED  
IN 1861

DEVOTED TO SCIENTIFIC BEE-CULTURE AND HONEY PRODUCTION.

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OF

THE AMERICAN  
BEE JOURNAL

PUBLISHED BY

THOMAS C. NEWMAN,

EDITOR AND PROPRIETOR.

925 WEST MADISON ST., CHICAGO, ILL.

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PREMIUM.—Any one sending one new subscription for the Weekly, or two for the Monthly, for one year, besides their own subscription for a year for the Weekly, will be entitled to a copy of "Bees and Honey," bound in cloth.

Any person sending a club of six, is entitled to an extra copy (like the club), sent to any address desired. Sample copies furnished free.

Papers are stopped at the expiration of the time paid for, unless requested to be continued.

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THOMAS G. NEWMAN,  
925 West Madison Street, Chicago, Ill.

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CLUBBING LIST FOR 1884.

We will supply the *American Bee Journal* one year, and any of the following Books, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both. Club.
The Weekly Bee Journal,.....	\$2 00.
and Cook's Manual, 7th edition (in cloth)	3 25.. 2 75
Cook's Manual, (in paper covers)	3 00.. 2 50
Bees and Honey (T.G. Newman) cloth	2 75.. 2 50
Bees and Honey (paper covers)	2 50.. 2 25
Binder for Weekly Bee Journal	2 75.. 2 50
Apriary Register for 100 colonies	3 50.. 3 00
Apriary Register for 200 colonies	4 00.. 3 50
Dzierzon's New Bee Book (cloth)	4 00.. 3 50
Dzierzon's New Book (paper covers)	3 50.. 3 00
Quinby's New Bee-Keeping.....	3 50.. 3 25
Langstroth's Standard Work.....	4 00.. 3 75
Root's A B C of Bee Culture (cloth)	3 25.. 3 00
Alley's Queen Rearing.....	3 25.. 3 00
Scribner's Lumber and Log Book	2 25.. 2 25
Fisher's Grain Tables.....	2 40.. 2 25
Moore's Universal Assistant.....	4 50.. 4 25
Honey as Food & Medicine, 100 Copies	6 00.. 5 50
Blessed Bees.....	2 75.. 2 50
King's Text Book.....	3 00.. 2 75

The Weekly Bee Journal one year and  
and Gleanings in Bee-Culture (A.J. Root) 3 00.. 2 75  
Bee-Keepers' Magazine (A.J. King) 3 00.. 2 75  
Bee-Keepers' Guide (A.G. Hill) 2 50.. 2 25  
Kansas Bee-keeper..... 3 00.. 2 75  
The Apiculturist, (Silas M. Locke) 3 00.. 2 75  
New Eng. Apriarian, (W.W. Merrill) 2 75.. 2 50  
The 7 above-named papers..... 7 25.. 6 25

The Monthly Bee Journal and any of the above, \$1 less than the figures in the last column.

Any meeting of the bee-keepers of Des Moines Co., Iowa, will be held on the second Tuesday in January, at 10 a. m., for the purpose of organizing a county bee-keepers' association, at Midleton, Iowa, in R. C. Crawford's Hall. JOHN NAU, FRANK MELCHER, A. M. BALDWIN, W. R. GLANDON, Committee.

The semi-annual meeting of the Keystone Bee-Keepers' Association, will be held at Scranton, Pa., on the second Tuesday of December (11th). Our present membership is 36.

GEO. C. GREEN, Sec.  
Factoryville, Pa., Nov. 23, 1883.

It would be a great convenience to us, if those sending us Postal Notes or Money Orders, would get the issuing Post-master to make them payable at the "Madison Street Station, Chicago, Ill." instead of simply "Chicago." If they are drawn on Chicago, they go to the general office, and we have to make a trip of six miles to get them cashed; but if they are drawn on the Station as above, it is only a few steps from our office. When sending us money, if you will please remember this, you will much oblige the publisher.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

## Advertisements.

THE AMERICAN BEE JOURNAL is the oldest Bee paper in America, and has a large circulation in every State, Territory and Province, among farmers, mechanics, professional and business men, and is, therefore, the best advertising medium.

DADANT'S

## HONEY CROP!

Our crop being very large, we offer THIRTY THOUSAND POUNDS of extracted Honey

## FOR SALE

at REASONABLE PRICES. We have both clover and fall honey. Samples sent on receipt of stamps to pay postage. The honey can be delivered in any shape to suit purchasers.

Send 15c. for our 24-page Pamphlet on Harvesting, Handling and Marketing extracted honey.

CHAS. DADANT & SON,  
5ABLY HAMILTON, Hancock Co., ILL.

EXCELSIOR  
HONEY EXTRACTORS

In answer to frequent inquiries for Extractors carrying 3 and 4 Langstroth frames, I have concluded to adopt these two new sizes. The 3 frame basket is in a can of the same size and style as the 2 frame. The 4 frame basket is in the larger can, with the cone or metal standard for the basket to revolve upon, leaving room underneath the basket for 75 or 80 lbs. of honey. It will be complete, with covers, and in every way identical, except in size, with the \$16.00 Extractor, 13x20, which is intended for any size of frame.

Excepting with the \$8.00 Extractors, all the different styles have strainers over the canal leading to the honey gate, and movable sides in the Comb Baskets. The \$8.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x13 inches.....	8.00
For 2 Langstroth " 10x18 " .....	8.00
For 3 " " 10x18 " .....	10.00
For 4 " " 10x18 " .....	14.00
For 2 frames of any size, 13x20 " .....	12.00
For 3 " " 13x20 " .....	12.00
For 4 " " 13x20 " .....	16.00

ALFRED H. NEWMAN,  
923 West Madison Street, Chicago, Ill.

## DADANT'S FOUNDATION

From JAMES HEDDON, July 27th, 1883.—Your Foundation is certainly the nicest and best handled of any I have seen on the market. It is the only foundation true to sample I have ever received.

From JAMES HEDDON, Aug. 10th, 1883.—I will contract for 2,000 pounds of foundation for next season on the terms of your letter.

From A. H. NEWMAN, Aug. 24th, 1883.—Book my order for 5,000 pounds for spring delivery.

From C. F. MUTH, Sept. 6th, 1883.—All of your shipments of foundation during the season were sold on the day of their arrival.

Dealers, send in your orders for next spring while wax is cheaper, and save trouble and money.

CHAS. DADANT & SON,  
5ABLY HAMILTON, Hancock Co., Ill.

## ELECTROTYPE

Engravings used in the Bee Journal for sale at 25 cents per square inch—no single cut sold for less than 50c. THOMAS G. NEWMAN,  
925 West Madison Street Chicago, Ill.

## BOOKS!

Sent by mail, on receipt of price, by

THOMAS G. NEWMAN,  
925 West Madison Street, CHICAGO, ILL.

On dozen or half-dozen lots, we allow a discount of 25 per cent. and pay postage. Special rates, on larger quantities, given upon application.

**Kendall's Horse Book.**—No book could be more useful to horse owners. It has 25 engravings illustrating positions of sick horses, and treats all diseases in a plain and comprehensive manner. It has recipes, a table of doses, and much valuable horse information. Price 25c. for either the English or German editions.

**Quinby's New Bee-Keeping.** by L. C. Root.—The author treats the subject of bee-keeping so that it cannot fail to interest all. Its style is plain and forcible, making all its readers realize that its author is master of the subject. \$1.50.

**The Hive I Use.**—Being a description of the hive used by G. M. Doolittle. Price, 5c.

**Novice's ABC of Bee-Culture.** by A. I. Root.—This embraces "everything pertaining to the care of the honey-bee," and is valuable to beginners and those more advanced. Cloth, \$1.25.

**King's Bee-Keepers' Text-Book.** by A. J. King.—This edition is revised and brought down to the present time. Cloth, \$1.00.

**Langstroth on the Hive and Honey Bee.**—This is a standard scientific work. Price, 75c.

**Blessed Bees.** by John Allen.—A romance of bee-keeping, full of practical information and contagious enthusiasm. Cloth, 75c.

**Foul Brood.** its origin, development and cure. By Albert R. Kohnke. Price, 25c.

**Extracted Honey; Harvesting, Handling and Marketing.**—A 24-page pamphlet by Ch. & C. P. Dadant, giving in detail the methods and management adopted in their apiary. 15c.

**Practical Hints to Bee-Keepers.** by Chas. F. Muth; 32 pages. It gives Mr. Muth's views on the management of bees. Price, 10c.

**Dzierzon Theory.**—presents the fundamental principles of bee-culture, and furnishes the facts and arguments to demonstrate them. 15c.

**Apinary Register.** for SYSTEMATIC WORK in the APIARY. The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book. Prices: For 50 colonies, \$1.00; for 100 colonies, \$1.50; for 200 colonies, \$2.00.

Deutsche Buecher,  
Ueber Bienenzucht.

**Bienen Kultur, oder erfolgreiche Behandlung der Bienen, von Thos. G. Newman.** Dieses Pamphlet enthält Belehrungen über folgende Gegenstände—Dertlichkeit des Bienenstandes—Honig pflanzen—Erziehung der Königin—Füttern—Schwärmen—Ableger—Versezken—Italienisieren—Büseher von Königinnen—Ausziehen—Bienen behandeln und beruhigen; weiter enthält es ein Kapitel, worin die neueste Methode für die Herrichtung des Honigs für den Handel beschrieben ist. Preis 40 Gents.

**Honey as Food and Medicine.** by Thomas G. Newman.—This pamphlet discourses upon the Ancient History of Bees and Honey, the nature, quality, sources, and preparation of Honey for the Market; Honey as food, giving recipes for making Honey Cakes, Cookies, Puddings, Foam, Wines, etc.; and Honey as Medicine, with many useful Recipes. It is intended for consumers, and should be scattered by thousands, creating a demand for honey everywhere. Published in English and German. Price for either edition, 5c.; per dozen, 50c.

**Preparation of Honey for the Market.** including the production and care of both comb and extracted honey, and instructions on the exhibition of bees and honey at Fairs, etc. by T. G. Newman. This is a chapter from "Bees and Honey." Price 10c.

**Swarming, Dividing and Feeding Bees.**—Hints to Beginners, by Thomas G. Newman. This is a chapter from "Bees and Honey." Price, 5c.

**Bee Pasturage a Necessity.** by Thomas G. Newman—Giving advanced views on this important subject, with suggestions what to plant, and when and how: 26 engravings. This is a chapter from "Bees and Honey." Price 10c.

**Bees in Winter, with instructions about Chaff-Packing, Cellars and Bee Houses.** by Thomas G. Newman. This is a chapter from "Bees and Honey." Price, 5c.

**Food Adulteration; What we eat and should not eat.** This book should be in every family, and ought to create a sentiment against adulteration of food products, and demand a law to protect the consumer against the numerous health-destroying adulterations offered as food. 200 pages. 50c.

**Scribner's Lumber and Log Book.**—Most complete book of its kind published. Gives measurement of all kinds of lumber, logs, and planks by Doyle's Rule, cubical contents of square and round timber, staves and heading bolt tables, wages, rent, board capacity of cisterns, cordwood tables, interests, etc. Standard book throughout United States & Canada. Price 35c. postpaid.

**Fisher's Grain Tables for Farmers, etc.**—192 pages, pocket form; full of useful tables for casting up grain, produce, hay; cost of port, interest; wages tables, wood measure, ready reckoner, plowing tables and more miscellaneous matter and useful tables for farmers and others than any similar book ever published. 40 cents.

**Moore's Universal Assistant, and Complete Mechanic.** contains over 1,000,000 Industrial Facts, Calculations, Processes, Trade Secrets, Legal Items, Businesses, Farms, etc. of vast utility to every Mechanic, Farmer, and Business Man. Gives 200,000 items for Gas, Steam, Civil and Mining Engineers, Machinists, Millers, Blacksmiths, Founders, Miners, Metallurgists, Assayers, Plumbers, Gas and Steam Fitters, Bronziers, Gilders, Metals and Wood Workers of every kind. The work contains 1,016 pages, is a veritable Treasury of Useful Knowledge, and worth its weight in gold to any Mechanic, Business Man, or Farmer. Price, postage paid, \$2.50.

**THOMAS G. NEWMAN,**  
925 West Madison St., CHICAGO, ILL.

# Weekly Bee Journal,

DEVOTED TO THE INTERESTS OF THE PRODUCERS OF HONEY.

VOL. XIX.

CHICAGO, ILL., DECEMBER 12, 1883.

No. 50.



Published every Wednesday, by

THOMAS G. NEWMAN,  
EDITOR AND PROPRIETOR.

## Prepare for the Fairs.

The article on page 643, by the Rev. O. Clute, is very timely, for the usual January meetings of the Executive Committees of Fairs will soon be here.

Public manipulations with bees and magnificent honey exhibits will soon become the most attractive features of State, County, and District Fairs. There are good many reasons for introducing such, but the chief one, perhaps, is that those who produce honey for the market may be induced to present it in the most marketable shape; for the new methods and new ideas of practical management must take the place of the old and undesirable ones.

We respectfully suggest to all who have the management of fairs, that a day be set apart during the season for public manipulations and explanations on this subject, and soon these *industrial days* will become as popular and attractive to the public as are now the "speed days" of horses, or the "trial days" of reapers and plows.

Bee-keeping should rank one of the foremost, if not the foremost, feature at these great gatherings. The premiums enumerated by Mr. Clute may seem slightly extravagant, to persons who have never seen bees and honey figure to any considerable extent in agricultural and mechanical exhibitions and fairs, but to any reflecting individual, who takes into consideration the magnitude of the bee-keeping interest at the present time, and the illimitable millions of pounds of honey now "wasting its sweetness on the desert air," from want of the proper encouragement and development of the industry, the figures will seem modest indeed.

## Sheep and Bee-Keeping.

An exchange gives the following reasons why bees cannot thrive on sheep pastures, and insists upon bee-keepers providing pasturage for bees:

It is easy to perceive why bees cannot thrive well on a sheep pasture. Sheep eat everything down very closely, and leave nothing in the shape of a flower upon which bees can subsist. There is no other reason for the popular belief that sheep and bees will not thrive together. The bees will not hurt the sheep in any way, but the sheep leave nothing for the bees to pasture in; that is the only difficulty, and where other feeding ground is provided for the bees than the sheep pasture, sheep and bees would thrive very well together.

Melilot clover and aromatic plants, such as mints and catnip, are the blossoms upon which bees seem to find the most continuous supply during the dryest months. Bee-keepers should encourage the introduction of such plants, as they can grow harmlessly along hedges and fences. It may be thought that a few plants of each kind cannot benefit the bees to any extent. Certainly not. But a few plants here and there will produce seed, and finally make waste places become sources of the most delightful of sweets.

>Last Monday, "our pastor," the Rev. A. Goodfellow, came to our office for a "call," and with sparkling eyes, said: "Good morning, Bro. Newman; I'll give you a conundrum. Here is the latest; it is rather far-fetched, but good." We remarked that we were more of a *punster* than a diviner of "conundrums," but that we could enjoy "a good thing" at any time. "Well," he said, "why is a bee-hive like a diseased potato?" Of course we gave it up. He replied, "a bee-hive is a bee-holder, is it not?" We assented, but intimated that we could not see the point. He then added, "a beholder is a spectator." True, we replied. He continued, "and 'a speckled tater' is one that is diseased, is it not?" We remarked that it was very far-fetched, indeed. He smiled, bowed himself out, and added, "put that in the BEE JOURNAL," and here it is.

We have received a copy of Mr. G. M. Doolittle's Club List for 1884, and Circular of bees, queens, etc. It is a very handsome pamphlet, and is a credit to him as well as Mr. Root, the printer. His address is Borodino, N. Y. On page 5 we notice the following paragraph under the heading of "Remarks":

Newspapers are now an actual necessity, and the man who does not take at least one or more papers, is soon behind the times, and is also depriving himself of one of the greatest blessings of life. In no other calling in life is the knowledge gained from reading, of more benefit than it is to the bee-keeper. The bee-keeper who cannot afford to take a bee paper, is only penurious to his own injury, of many times its cost; therefore, I urge all into whose hands this circular may fall, to take at least one of the bee papers, that you may gain knowledge which will help you to work your bees to the greatest profit. The Weekly AMERICAN BEE JOURNAL is now an established fact, and is taken by nearly all practical bee-keepers. Its weekly visits are those which no bee-keeper can afford to dispense with, for the knowledge gained from one number is often worth many times its cost. The putting in practice of its teachings (and that of the other bee papers), is what helped me to secure \$1021.30 net profit from 60 colonies of bees during the past poor season, when basswood was the only tree or plant which yielded honey. The AMERICAN BEE JOURNAL is published in an attractive form, and it is hardly necessary for me to say that I consider it at the head of all the bee papers in the world.

Mr. D. has our thanks for so frankly giving his opinion of the practical value of the BEE JOURNAL.

Mr. George Grimm, of Jefferson, Wis., has gone to Europe, and will be absent several months. He is the son of the world-renowned Adam Grimm, who was one of the pioneers of bee-keeping in America. He has our best wishes for a pleasant voyage and a safe return.

The 28th annual meeting of the Illinois State Horticultural Society, will be held in Maennerchor Hall, Bloomington, Ill., Tuesday, Dec. 18.

## Local Convention Directory.

1883. Time and Place of Meeting.	
Dec. 15.—Platt County, at Monticello, Ills.	A. T. Pipher, Sec.
Dec. 19.—Lorain County, at Elyria, O.	O. J. Terrell, Sec., N. Ridgeville, O.
1884.	
Jan. 8.—De Moines Co., at Middleton, Iowa.	
Jan. 8.—Cortland Union, at Cortland, N. Y.	M. C. Bean, Sec., McGrawville, N. Y.
Jan. 9.—Central Illinois, at Bloomington, Ill.	Jas. Pindexter, Sec.
Jan. 10.—Champlain Valley, at Middleburg, Vt.	J. E. Crane, Pres.
Jan. 14, 15, 16.—Ohio State, at Columbus, O.	C. M. Kingsbury, Sec.
Jan. 15, 16.—N. W. Ills., & S. W. Wis., at Freeport.	J. Stewart, Sec., Rock City, Ill.
Jan. 16, 17.—N. E. Ohio, and N. W. Pa., at Jefferson, O.	C. H. Coon, Sec., New Lynde, Ohio.
April 18.—Iowa Central, at Winteraset, Iowa.	J. E. Pryor, Sec.
Oct. 11, 12.—Northern Mich., at Alma, Mich.	F. A. Palmer, Sec., McBride, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

## What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

## Cellar Wintering.

Will Mr. Heddon please answer the following:

1. Will a pipe 6x4 inches be large enough to ventilate a cellar containing 50 colonies?

2. Would the above pipe be sufficient unjoined to the stove-pipe, but 25 feet high?

3. Do bees always hum more or less when they are wintered in the cellar?

C. W. DAYTON.

Bradford, Iowa, Nov. 28, 1883.

ANSWERS.—I have never been able to satisfactorily demonstrate that ventilation pipes in cellars and double houses did any good in wintering bees.

Perhaps they do; though I have seen cellars full nearly all die with ventilation pipes attached, and all alive to a colony with no ventilation pipes, and every thing in wet, moldy condition.

1. 6x4 inches would be large enough for the interior of a pipe, either attached to a stove-pipe, or I should think if standing 25 feet high, though I have never tried that.

2. Answered above. I would let the bottom of the pipe extend down to within 6 inches of the bottom of the cellar.

3. I have known bees to winter well where a good deal of humming was kept up through their confinement. I have known bees to keep almost perfectly still during the same time, and they always winter well. I have found that changing the degree of temperature will change the tendency to roar or hum, but it will not prevent

or cure diarrhoea. Another thing. I found that in some winters 10° lower temperature kept the bees stiller than the still temperature of the preceding winter, when the number of colonies and hive ventilation was the same. This is one more of the unaccountables.

## Frames Standing on the ends in Winter.

Will Mr. Heddon please answer the following question? Have you ever wintered bees on the Langstroth frame standing on the end in a case, packed with chaff? If so, what were the results?

J. G. NORTON.

Macomb, Ill., Nov. 28, 1883.

ANSWER.—I have tipped Langstroth hives up at various angles, from a slight pitch to nearly standing on end, but I have never seen any better results by so doing. You need not be afraid of any derangement by changing the position of the combs. We used to winter box hives upside down with good results, and I have had the queen breed in a comb lying horizontal. If I considered it advantageous to make any change at all, my idea would be to give the hive a pitch a little more than 45 degrees, and do so just as soon as the surplus receptacles are removed in the fall. This will give the colony a chance to arrange their stores to their notion, according to the new position of the hive.

In the *Kansas Bee-Keeper* for March 1883, I gave my ideas of wintering in shallow vs. tall hives.

Much complaint was made last season of the delay in getting "supplies," which were ordered of the different "dealers" in the rush of the season. Now, to avoid a repetition, let all order early, and then if a delay does occur, it will not make as much difference to them as if the orders were sent in just as the goods were wanted for use.

For \$2.75 we will supply the *Weekly BEE JOURNAL* one year, and Dzierzon's *Rational Bee-Keeping*, in paper covers; or in cloth for \$3.00. This is a rare chance to get the latest book of that celebrated German bee-master for a trifle. The price of the book alone is \$2.00.

Owing to the death of our Secretary, Mr. T. Brookins, please announce in the *BEE JOURNAL* that the annual meeting of the Champlain Valley Bee-Keepers' Association, will meet in the parlors of the Addison House, Middleburg, Vt., the second Thursday in January, 1884.

J. E. CRANE, Pres.

## Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL,  
Monday, 10 a. m., Dec. 10, 1883.

The following are the latest quotations for honey and beeswax received up to this hour:

## CINCINNATI.

HONEY—The market is slow; arrivals exceed the demand which, however, has improved some. There is a better demand for comb honey, and supplies are short, which, no doubt, is temporary, as usual. Last year at about this time, comb honey was at its highest, when our sanguine friends very naturally held on, expecting more. However, large supplies commenced to arrive, and prices kept going down steadily. Bee-keepers in general bent their energies on the production of extracted honey last season, more than ever before. We had a large crop, and extracted has been dull, so far, not only because of the large supply, but because manufacturers complain of dullness in their business. Consequently, we have reason to believe that the present slow market is temporary.

The present state of the honey market gives our bee-keeping friends another chance for a disappointment, to wit: That of over-production of comb honey another season. This is merely an idea of my own, and our friends may take it for what it is worth.

Extracted honey brings 7@8c. on arrival. Best comb honey, 16@17c. in small sections.

BEESWAX—Is of ready sale at 28@30 on arrival.

CHAS. F. MUTH.

## NEW YORK.

HONEY—White clover and basswood in 1 and 2 lb. sections, 17@21c. Dark and second quality, 14@15c.; extracted white clover in kegs and barrels, 9@10c.; dark, 8c.

BEESWAX—Prime yellow, 27@29c.

H. K. &amp; F. B. THURBER &amp; CO.

## CHICAGO.

HONEY—The market remains without change from that of last week. Dealers and retailers buy only enough to supply the demand for present use. It is impossible to place lots, or entire shipments, owing to the reluctance of dealers to buy in advance of immediate wants. Prices obtained for white comb in 1 lb. sections, 18@20c.; 1½ and 2 lb., 15@18c., according to beauty of same. Extracted honey, 8@10c. per lb., according to color, body and flavor.

BEESWAX—Yellow, 33c.; medium, 28@30c.

R. A. BURNETT, 161 South Water St.

## KANSAS CITY, MO.

HONEY—Receipts of comb honey has been more liberal for the past week, but the demand still keeps everything that is of fair quality well cleaned up. Choice 1 and 2 lb. sections are taken on arrival at 18c.; larger sections and dark honey 16@17c. Sales of extracted for the past week, about 4,000 lbs., mostly at 8 cts. The feeling for extracted honey is a little better, and I look for a firmer market.

JEROME TWICHELL, 536 Delaware Street.

## SAN FRANCISCO.

HONEY—There has been some attempts at negotiation in comb honey on Eastern account this week. The market for extracted is dull, and it is doubtful if more than 7@8c. could be realized for choice water white in a wholesale way. White to extra white comb, 16@18c.; dark to good, 12@14c.; extracted, choice to extra white, 7@8c.; dark and candied, 6@7c.

BEESWAX—Wholesale, 27@30c.

STEARS &amp; SMITH, 433 Front Street.

## ST. LOUIS.

HONEY—Choice comb in light supply, fair demand and firm at 15@17c. per lb.; dark, broken and poorly handled, dull at less. Strained and extracted steadily at 6@7c.; choice in fancy pkgs. more.

BEESWAX—Salable at 28c. for prime.

W. T. ANDERSON &amp; CO., 104 N. 3d Street.

## CLEVELAND.

HONEY—Honey continues in excellent demand, as reported last; every lot of choice white comb is taken up as fast as it comes at 18c. in quantity for 1 lb. sections, and an occasional sale at 19c.; in a very few instances only, 20c. has been reached. Broken lots and second quality is very slow sale. For extracted there is no demand.

BEESWAX—Is eagerly inquired for at 28@30c., but none to supply the demand.

A. C. KENDEL, 115 Ontario Street.

## BOSTON.

HONEY—Our market is very quiet on honey. We quote 16@18c. for best 2 lb. sections—18@20c. for best white 1 lb., and 10c. for extracted.

BEESWAX—We have none to quote.

BLAKE &amp; RIPLEY, 37 Chatham Street.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra



For the American Bee Journal.

### Readily Movable Hives.

JAMES HEDDON.

Much of value has been said about movable combs, and while nearly all know of their worth, few give due importance to readily movable hives.

First let me tell you something about how my hive is made, and then you can better form an idea of what I mean by "readily movable hive." The inside measure is 10 inches deep by  $11\frac{1}{2}$  wide by  $18\frac{1}{2}$  long, and takes 8 standard Langstroth frames. The depth, 10 inches, we always make  $10\frac{1}{8}$  to allow for shrinkage, which will take place in after years, even if we use the most thoroughly seasoned lumber. The sides of the hive are  $\frac{3}{4}$ , the ends  $\frac{5}{8}$ , the bottom  $\frac{5}{8}$ , the cover  $\frac{5}{8}$ . From these dimensions we do not vary, and any hive that does vary from them, I believe to be just that much "off."

I fancy I have more good reasons than I care to take space here to enumerate for using these thicknesses of lumber. Our bottom boards are nailed permanently to the hive, and this fact, and the thicknesses of the lumber thus given, makes our hive easily movable.

The foregoing describes the brood-chamber, and the surplus department consists of two to four cases, the sides of which being  $\frac{3}{8}$  of an inch thick, the partitions  $\frac{1}{2}$  inch, and each case weighs only about 4 lbs. These and the honey-board make the hive complete. The cases, when on, being covered by the brood-chamber cover, and each having a capacity for about 25 pounds of honey, they are used upon the tiering-up plan, and not more than three are usually used on a hive at one time. We use no outer case, because none is needed, and in three or four ways such a covering is much worse than useless. The reader will observe that my hive, whether with or without the surplus department, is very light, and easily handled compared with others.

Now, when one comes to manage large apiaries, pushing business upon that scale which necessitates dispatch, he will find a hive possessing this easily movable principle of more value than one possessing all the advantages derived from cumbersome hives. Our methods of securing increase, depositing laying workers, preventing increase or after swarms, and many other manipulations which we find we can accomplish much quicker and better with our peculiar methods than by any other we know of, demand the use of a light, easily movable hive. Such are not only almost a necessity with the less muscular, but very pleasing to all who carry on business in a practical and profitable manner.

It is my opinion that this problem of wintering, or cause of dysentery, is

soon to be understood, and it is further my belief that when it is, the next important question will be, "now that I know how to winter my bees with certainty, how can I do this the cheapest," and this will lead to cellar wintering; and here, again, comes in the advantage of the "readily movable hive." About one-third of the time I have spent speculating and experimenting in the line of apiculture, has been spent in hives and fixtures pertaining to them, once supposing that, hidden in mysterious depths, was an almost automatic hive. I long since found out how mistaken was that supposition, yet the thoughts and experiments were not in vain, for I now enjoy a hive much nearer to it than the one used in the past time referred to.

I am aware that no one hive embraces, or can embrace all, or nearly all, the valuable features pertaining to hives that oftentimes combine one such feature. Such combination positively necessitates the omission of two or three others equally valuable, forcing us to make that more difficult selection of the hive combining most worth, in principles, all things considered. Before closing, I wish to state what I believe to be leading principles, which I have faith that the future wisdom and practice of bee-keepers yet to be, will bear me out in.

1. All hives should be easily and readily movable.

2. The stories should move off and on to each other without the necessity of the least upward or downward motion; that is, no telescoping principle.

3. There should be no dead air space or double covering over the surplus room.

4. The sections should never rest on each other or the brood frames.

With your permission, I will quote from that portion of the specifications of the Langstroth patent, relative to the shallow chamber, or air space above the frames or bars.

"The apertures or bee passages in the honey board may be made without being liable to be closed by the bees, as they so frequently are in hives which have not this shallow air space. It will be seen that the bees can pass into this shallow chamber from between all the ranges of comb, and from the front and rear walls, *d*, of the hive, and the sides (*c*, *c*, figs. 1, 2 and 3), of the frames without even passing through the combs at all, and that they can pass from the shallow chamber into any of the honey receptacles, without, as in other hives, losing much time in the height of the honey harvest by crowding through populous combs or contracted passages.

"This shallow chamber, while it greatly facilitates the storage of honey in large receptacles, is specially adapted to securing it in small ones, which usually meet with the readiest sale.

"1. The building of comb requires the bees to maintain a high temperature, and they work to the best advantage when they can economize their animal heat, but this they cannot do in small receptacles, which commun-

cate with the hive through such apertures as are usually made in its top; such apertures not admitting freely the heat and odor from the main colony, and the bees in a small receptacle being too few to keep up the requisite temperature. The shallow chamber, however, like the part of a room nearest the ceiling, is in the storing season always full of the warmest air of the hive—thus aiding to keep the small receptacles full of the same.

"If large openings or bee passages are made in hives having no shallow chamber, for the purpose of giving a freer admission into small receptacles, of the heat and odor of the hive, the bees often connect the combs of the surplus receptacles with those of the main hive, making it difficult to remove the surplus honey in a proper condition, and the queen being thus able to travel over the combs into the receptacles is much more liable to enter them for breeding, than she is where the interposition of the shallow air space would require her to leave the combs.

"2. Bees always desire to work in large numbers, so that they can easily intercommunicate with each other, and the common arrangement for inducing them to work in small receptacles, is opposed to this instinct, whereas the shallow chamber affords a place of repose for multitudes of bees engaged in secreting the wax to be used in the surplus receptacles, and as a succession of bees are thus constantly ascending and descending, they work in small receptacles with scarcely more isolation, and with almost as much rapidity as though they were merely filling the upper part of their main hive."

"This shallow chamber answers other highly important purposes: (a) It prevents the bees from cementing the cover or honey board to the tops of the frames or bars, thus enabling it to be more easily removed when access is wanted to the combs. (b) It enables the cover to be put over the frames or bars with much less danger of crushing bees than if it rested directly on their tops. (c) It permits the bees, when the cover is on, to pass from comb to comb above the tops of the frames or bars. (d) It aids to keep a feeder in cool weather filled with the warmest air of the hive. (e) It gives a dead air space between the combs and the cover, thus more effectively guarding the bees against extremes of heat and cold. (f) It enables us to give the bees better protection against dampness in their hives, as by leaving the apertures in the cover open, in cold weather, there is a much freer escape of moisture than when the cover rests flat upon the frames or bars."

Dowagiac, Mich., Nov. 27, 1883.

The 5th annual Convention of the Northeastern Ohio and Northwestern Pennsylvania Bee-Keepers' Association, will be held at Jefferson, Ohio, Jan. 16 and 17, 1884. All are cordially invited.

C. H. COON, Sec.  
New Lyme, O., Nov. 26, 1883.

For the American Bee Journal.

## Prevention of Swarming.

L. L. LANGSTROTH.

Believing that it is right to hive swarms which cannot be kept from issuing on Sunday, let me make some suggestions to those who, like myself, wish on this day to have as little as possible to do with bees.

1. By giving the material for starting queen-cells on Saturday, there will be no occasion to care for them on Sunday.

2. Use some proper device for confining the queens on Sunday, or any other day when you do not wish them to lead out swarms. This is a point to which I have given much attention. On page 174 of the third edition (1858) of my work, I say,—

"As the queen cannot get through an opening 5-32 of an inch high, which will just pass a loaded worker, \* if the entrance to the hive be contracted to this dimension, she will not be able to leave with a swarm. This method of preventing swarming requires great accuracy of measurement, for a very trifling deviation from the dimensions given will either shut out the loaded worker, or let out the queen. These (adjusted) blocks, if firmly fastened, will exclude mice from the hive in winter. When used to prevent all swarming, it will be necessary to adjust them a little after sunrise and before sunset, to allow the bees to carry out any drones that have died."

In my second edition (1858), page 202, referring to this device, I say:

"By this arrangement, all swarming on Sunday, or any other day when the apriarian does not desire it, may be prevented."

Also, page 203,—

"It also may be found, on further experiment, that the entrances to all the spare honey-receptacles may be so adjusted that the queens will never be able to enter them for the purpose of depositing eggs."

Also, page 202,—

"A very important use may be made of blocks thus arranged, to get rid of the drones. In that part of the day when they are in full flight, adjust the blocks so that they cannot enter. Toward dark, or early next morning, they will be found sprawled out upon the alighting-board, or hanging in clusters under the portico, and may be given to chickens, which can easily be taught to devour them. In a few days nearly all the drones in the apiary may be thus destroyed."

\* Huber does not give the size necessary for confining a queen, but he spoke of a GLASS TUBE adjusted so as to pass out a worker, and not a queen. The smallest queen I ever saw could not get through my blocks. Although the workers are at first slightly annoyed by them, they soon become accustomed to them, as they do not confuse them by presenting the entrance in a new place. The ventilation not depending on this contracted entrance, abundance of air can be given to the bees when the blocks are adjusted so as to confine the queen. Ill-health for the last two summers has prevented me from giving this method of preventing swarming such a full trial that I can endorse it, except for temporary purposes. \* \* \* A THEORY which may seem so plausible as almost to amount to positive demonstration, may be encumbered by some unforeseen difficulty, which speedily convinces even the most sanguine that it has no practical value.

Further experience showing that it was often quite difficult to maintain the 5-32 of an inch by depressions cut in the entrance-regulating blocks, I fastened a few 5-32 strips with clinching nails between two pieces, each  $1\frac{1}{8}$  inch long (the length of the usual entrance), the lower strip having two bevels to facilitate the exit and entrance of the bees. A central hole, governed by a cork, allowed dead drones to be easily dragged out, or a young queen to fly for mating. Still the bees would worry from having to crawl too far under such narrow dimensions. At last the 5-32 was cut in a thin metal strip, and such a device enabled me both to prevent my costly imported queens from eloping, or running the risk of being destroyed by stray queens.

On a recent visit to the large apiaries of my friend, Mr. D. A. Jones, of Beeton, Ontario, I saw all the points, on which I had labored so long, carried out in a much more satisfactory manner by means of his perforated zinc plates. His *bee-guards*, made of these plates, allow the workers to pass in the freest possible manner, while the ventilation of the hive is not in the least interfered with. The only improvement in them which I can suggest would be to punch out a central hole, governed as in my device, by a small cork. These can be adjusted in a few moments, and Sunday swarming, or swarming on any day not convenient, be prevented without at all worrying the bees. By them, all bad or superfluous drones may be quietly destroyed, by shaking off the bees from their combs, in front of their hive, the queen, of course, being properly rescued. Some may find this the easiest way, more especially with black bees, for finding a queen, or of making it absolutely sure that there is none in a colony to which we wish to introduce a valuable queen.

Mr. Jones uses sheets of this perforated zinc to confine the queen to the lower story of the hive, or to any desired part of the brood-chamber, so that she cannot enter the surplus honey receptacles. These sheets also prevent the bees from building small combs between the upper and lower sets of frames—a thing which has often caused so much trouble in hives where more than one story is used.

I see no reason why sections for comb honey may not be set to the best advantage directly on these sheets. Before giving up my apiary, I found that small boxes were much more readily filled by Italian bees, when put directly on top of the frames; and that, however admirably the shallow chamber answered for black bees, the Italians plainly wanted nothing to do with it. How much time and money have been spent in trying to control the mating of our queens! As far as practical results are concerned, have we advanced at all beyond the Kohle process, given so many years ago in the AMERICAN BEE JOURNAL, by which young queens and drones from a selected colony were made to fly later in the day than the other drones? May we not, by Mr. Jones' bee-guards, make a still closer approximation to

the mating of our queens with our best drones? If we are not liable to be troubled by drones outside of our own apiaries, how easily we can shut in those that we do not desire to breed from! or, if troubled by drones from bees in the woods, or from colonies too near us, we can confine our young queens, and the drones of selected colonies, until it is so late in the afternoon that other drones have ceased to fly; then by pouring a little thin sugar syrup into the proper colonies, we can quickly tempt both queens and drones to take wing with the excited workers. As the power to control the mating of our queens is fully as important as the control of the same point in our domestic animals, I shall never cease to believe that, sooner or later, we shall obtain the desired result.

The care with which queens and drones can be confined by the Jones bee-guards, without at all lessening the ventilation of the hive, and with the minimum of interference with any of the labors of the colony, promises to open a wide field for many important processes. It may now be possible, in the hands of careful breeders, not only to keep different races of bees pure in the same apiary, but to build up permanently any desired cross between the different races.

Few bee-keepers, who keep up with the modern improvements, are ignorant of the great services of Mr. Jones, in searching the world, at great expense, to procure the best bees. By his great enterprise he has done more than any one living, to make American bee-keeping known in the Old World. We have been much slower, however, to recognize how much he has done for practical apiculture by his many ingenious devices, and, most of all, by the costly experiments and machinery by which he secured for us his perforated metal sheets.

Oxford, O., Nov., 1883.

• The Ohio bee-keepers will hold their annual convention in Columbus, O., Jan. 14, 15 and 16, 1884. All interested in bee-culture are invited. The following subjects will be discussed: "How to winter bees successfully." "Are the new races of bees a success?" "What can we do to prevent adulteration of honey?" "How to create a home market for honey." "How many colonies can be kept in one locality?" "Can we do without separators?" "Which are best, deep or shallow frames?" "What shall we do with second swarms?" "How many brood frames are necessary in a hive?" "Which is the most salable section, one-half, one or two pounds?" "Is it advisable for all bee-keepers to adopt a standard size of frame?" "What is the most desirable width of sections?"

The above questions will be discussed by eminent men, such as Rev. L. L. Langstroth, Dr. Besse, S. D. Riegel and others, and in addition to the above, Prof. Lizenby, of the Ohio University, will deliver a lecture on "Honey-producing plants;" also Mrs. Jennie Culp will read an essay.

C. M. KINGSBURY, Sec.

For the American Bee Journal.

**"The Pollen Theory"—Facts.**

A. R. KOHNKE.

Exactly what we want. Fact No. 1. Colonies affected with the bee diarrhoea have always pollen in their hives; fact No. 2, colonies wintered largely or exclusively on sugar syrup escape the disease; fact No. 3, voidings of the bees affected with the disease have the same color as pollen, there being no other substance in the hive having the same effect to color.

Now, for Mr. Doolittle's experiments, as stated in No. 48, page 606. Mr. D. has tried to force bees by starvation to eat pollen, in which he failed. This proves nothing but his failure; it does not prove that the bees do not eat pollen, for we know they do. Pollen is not, and cannot be the primary cause; certainly not. Primary causes are those which compel the bees to eat the pollen when they ought not to; viz.: out of season. If Mr. D. had furnished besides pollen and little or no honey, those other conditions necessary to produce the disease, I dare say he would have succeeded.

Now, I wish Mr. D. and such other bee-keepers as are interested in it, would experiment as to how to produce the disease, at will, whenever they wish; then we would arrive at facts and try to avoid such conditions.

Like Mr. D., I have also tried to force bees to eat pollen, just one week later than Mr. D.; viz.: Oct. 19, this fall. I had some very old combs, full of honey, which I did not want to use next spring. I extracted the honey, and found two-thirds of the frames filled with pollen and covered with honey. Quite a quantity of the pollen being soaked through with honey, was thrown out. Having some colonies which are rather scant in stores, I fed five of them of this honey, on the above date, which I chose, to avoid robbing, as it was too cold for the bees to fly, as also the 20th and 21st. On the 22d the bees had a chance to fly, and every colony thus fed showed signs of bee diarrhea. At the same time other colonies, part of which were fed with sugar syrup and part with powdered sugar, made into a dough with clover honey, were not affected.

By all means let us have facts. I have drawn conclusions from such as have come under my observations. Of course, I am liable to err; but, as long as my conclusions are not proven to be erroneous, I think I am justified to consider them correct.

To conclude, I will add, that I lost 2 colonies, last winter, by this disease (?) which had not a particle of brood, but the honey was gone clean, and part of the pollen eaten.

Youngstown, O., Nov. 31, 1883.

The annual meeting of the Lorain County Bee-Keepers Association will be held in the Court House at Elyria, Dec. 19, 1883.

O. J. TERRELL, Sec.  
North Ridgeville, O.

For the American Bee Journal.

**My Experience with Syrian Bees.**

L. A. LOWMASTER.

I will give my experience with Syrian bees, and as I do not rear queens to sell, I have "no axe to grind." When I first heard of the Syrian bees, I was anxious to try them, so I sent to Mr. Jones for two queens, which I received in July, 1881, and as it was too late in the season to test them thoroughly, I concluded to keep them until I was satisfied whether they were inferior or superior to other races of bees.

In the fall of 1881, when I prepared them for winter, they were stronger in numbers than the rest of my bees. They stood the winter well, and in the spring of 1882, they were more populous than the Italians and Albinos; so I thought that I would rear a few queens for my own use, and I succeeded in rearing some very fine queens, and as I did not put on any boxes in 1882, I did not get any surplus honey; but when I prepared them for winter in the fall of 1882, I found nearly every colony had twice as much honey as they needed to winter on, having the brood-chamber full, with the exception of two or three combs, which was about half-full of brood.

The winter of 1882-83 was hard on bees in this part of the country, but my Syrians came through in good condition; they wintered better than the rest of my bees, excepting the Cyprians, which I had  $1\frac{1}{4}$  miles from my home apiary.

Nearly all of the rest of my bees (Italians, Albinos and hybrids) were weak, and in a deplorable condition, so I had to take frames of hatching brood from the Syrians to build up weak colonies, and when the combs were full of brood, and the young bees commenced to gnaw through, I took them out and exchanged them with the weak colonies the second time.

After taking all the brood out twice, it did not seem to affect them at all; and by the time white clover was in bloom, they were stronger than the Italians and Albinos, and they commenced to work in the sections two weeks before the Italians (I did not take any brood from the Italians). The Syrians cast larger swarms, besides gathering more surplus honey than the Italians ever did for me.

The young colonies filled 8-frame Langstroth hives, and stored more honey in the sections than did the old colonies of Italians and hybrids, while the Albinos and hybrids only filled the brood-chamber, and only gathered enough honey to winter on this fall. When I prepared them for winter they all had plenty of honey to carry them through safely, and more.

I find the Syrians splendid honey-gatherers; they work early and late; they carry heavy loads of honey, and there are lots of them. And yet, some say they are no good.

The Albino bees are not as good as the Italians. I have had them on trial for three or four years, and I

know whereof I speak. I never got as much honey from them during all this time as I did this year from one colony of Syrians. I have "weighed them in the balance" and "they are found wanting." They had their day, and must step down and out. I will keep one or two colonies of them just to look at.

One writer says that he would like to see the man "that can tell the difference between the Italians, Syrians and Cyprians." Now, if there is no difference, why is he afraid to try them, before he says they are not as good as his strain of bees? If he will come here, I will show him the difference between the Syrians, Italians and Cyprians.

I find no difficulty in telling one from the other, and even queens fertilized by Cyprian drones, produce bees which are readily known from pure Syrians. The general color, markings and movement of these bees, say nothing of their working qualities, are sufficient to enable one to distinguish the races readily, but there are also other points in which they differ. Upon opening a hive of Syrian bees, and using smoke, the workers crawl about in a manner somewhat like black bees, but soon become quiet, if carefully handled. The workers fly in a darting manner, and alight quickly when near the desired spot, or, perhaps, it cannot be better expressed than to simply say they fly from point to point, while the Cyprians and Italians exhibit a more moderate motion.

The Syrian bees present a decidedly gray color, though the abdomen has a ringed appearance. The ground color is a grayish-black; the body, before the fuzz is worn off, being very light; the gray-colored fuzz is very thick on the thorax, and the latter half on each segment of the abdomen, especially those after the yellow bands, are thickly set with light-colored fuzz, giving them a striking appearance. The three yellow bands are very prominent and yellow.

The shield between the wings is not as prominent as with the Cyprians, though still visible. The Syrian drones are very fine, large and vigorous, and have an exceedingly thick coat of whitish and blue-tinged "fuzz" over the greater part of the thorax, especially on the sides, and a very noticeable amount on the abdomen. In proportion to their bodies, I think their wings are somewhat larger than those of the Italians or Cyprians.

The Syrian queens are wonderfully prolific, laying an incredible number of eggs in a season; in fact, I would not be surprised if a Syrian queen would lay as many eggs in one season as blacks or Italians do in a life time. The Syrian queens are very small when not laying, and some persons think them ordinary looking; but give them plenty of bees and room, and they get very large, and fill a frame of comb with eggs so rapidly that you would imagine it impossible for one queen to deposit them so fast. One Syrian queen can lay eggs enough in 21 days to make from 4 to 6 colonies of bees, if they were all cared for and

hatched. This may seem surprising, but try it and be convinced.

The Syrian bees build less drone comb than the blacks or Italians; they protect their stores against robbers with such determination that they often catch the robber on the wing, around the hive, and punish them before they even get time to alight; in fact, they are robber proof.

Their bodies are more telescopic, which enables them to carry larger loads of honey, and to contract their bodies at other times to quite small proportions.

They are swift on the wing, flying so rapidly that only those heavily laden with honey can be secured on the bloom. No race of bees will fly more rapidly, or further (when necessary) in search of honey than will the Syrians. They have been known to fly  $6\frac{1}{2}$  miles to obtain pasturage. I have seen my Syrians  $2\frac{1}{2}$  miles from my apiary; how much further they went I am unable to say.

As honey gatherers, they are not excelled, and both the Cyprians and Syrians will make a greater effort to obtain honey when there is a scarcity than the other races, and are valuable for comb honey. My Syrians work on the first crop of red clover (large heads) when there was a plentiful flow of white clover honey; and I never saw bees thicker on buckwheat than I saw the Syrians on the red clover this season.

Mr. Morris, who lives  $1\frac{1}{2}$  miles from my apiary, one day last summer came to see my bees, and he told me when he was cutting his red clover for hay, his son remarked: "Father, look at the bees working on the red clover." Mr. Morris said he got off the machine to see if they were his bees, but they were not; they were a different race—his are black bees—when I showed him my Syrians, he said they were the bees that he saw working on his field of red clover, and he said that was the first time he ever saw bees working on red clover. He is a man that can be relied on.

The Syrians winter better than the Italians, come out better in the spring, and do not dwindle so badly. Everything considered, I regard the Syrian bees as the most superior race ever imported into this country, and that, when they have been subjected to the same careful selection and breeding as have the Italians, they will command more prominence than have the Italians. I would most emphatically affirm that the Syrians have a larger number of the necessary qualities than any other race or strain of bees. I will admit that I am using strong language, but my experience with this race, regarding queen-breeding, honey-gathering and wintering, fully warrant me in making the statement. These, with many other experiences and facts connected with the Syrians, fully support me in stating that in them we have the foundation on which to build the *Apis-Americanus*. I am not prejudiced against any race of bees, and the above is an honest description of the Syrians as I see them.

Belle Vernon, O., Nov. 22, 1883.

For the American Bee Journal.

### Shall we use Old Combs?

C. H. DIBBERN.

It has been claimed from time immemorial that pieces of combs are invaluable to the bee-keeper. I have worked on this line myself for years, but have come to the conclusion that it is valuable only for the wax it contains to be made into foundation. I usually extract all partly-filled combs in the fall, and save them carefully to be used again the following spring. After practicing this for years, I am satisfied it is poor policy. However it may have been, before the advent of foundation, I am satisfied that, like Mr. Heddon's plan of transferring, it is all changed now.

During the past summer I used a good many nice white combs in two-pound sections, that had been built the year before, and as the sections were nice and new, thought I had a bonanza in getting these filled and capped early. Now, what was the result? The bees entered the sections eagerly, and in less than two weeks a good part were capped. By this time I was out of empty combs, and was putting on sections filled with foundation. Now, I was beginning to think of taking off some of the sections that had been filled with empty combs, and what was my disgust and disappointment in finding the bees uncapping it again, and a good deal of it with the caps all burst off. Well, I could only leave it, and soon commenced to take off the sections that had been filled with foundation, that were as fine as I ever saw. I kept taking off some of the sections that were full of empty combs about all summer, and most of it went into No. 2 honey, while that built on foundation, made at the same time, was extra nice.

The explanation is very simple. When honey is coming in liberally, the bees will fill comb that is already built too fast, and cap it over before it is ripe and souring ensues. If the bees are compelled to build the comb, or draw out foundation, the cells are filled so gradually that the honey will keep by the time the cells are built out. Every particle of comb should be saved, and carefully melted up and made into foundation. It may look like sacrilege to melt up nice white comb, but it will pay.

Milan, Ill., Nov. 27, 1883.

### Trenton, Ontario, Convention.

A meeting of bee-keepers in the vicinity of Trenton, Ont., was held at Trenton on Oct. 16, 1883. P. C. Dempsey was elected Chairman, and J. H. Peck Secretary. Constitution and by-laws were adopted, and the following were elected officers for the ensuing year:

President, P. C. Dempsey; Vice-Presidents, W. C. Wells, C. W. Post, S. Powell, J. G. A. Wallace, H. G. Stafford, Edward Caverly, Allen Pringle, John Mitchell, R. A. Brook, A. D. Allen, D. J. Hawley; James H.

Peck, Secretary-Treasurer; H. F. Whittier, Janitor.

### THE BEST METHOD OF WINTERING BEES.

W. C. Wells winters his bees in a cellar under his shop—has a sub-earth ventilation by means of 4-inch tile pipe—prefers 6-inch tile. When he prepares his hive for winter, takes empty combs out of the hive and crowds the remaining sections up close, by means of division-boards. Makes a frame the size of the top of the hive, and about 2 inches deep, tacks on cotton cloth, and fills with sawdust, which allows the dampness to pass off, while it retains the animal heat in the hive. Packs his colonies about the middle of October, and puts them into the cellar about the middle of November. Keeps the temperature as near 45° Fahr., as possible.

W. C. Post winters his bees similarly to the plan of Mr. Wells, but ventilates by means of the cellar windows.

S. Powell winters his bees in a cellar with caps removed, and nothing but a coarse piece of bagging placed over the top of the hive—ventilates his hives by means of a hole in the back part of the hive, covered by fine wire cloth.

H. G. Stafford winters his bees similarly to Mr. Wells—has sub-earth ventilation for his cellar, in which he winters his bees.

J. G. A. Wallace wintered his bees, last winter, in the stone basement of a barn, and lost 58 out of 66 colonies; attributes his loss entirely to sour honey.

P. C. Dempsey winters his bees in bee cellars, specially built and ventilated for that purpose. His experience covers a period of thirty years. Thinks the principal cause of failure is by not putting bees into good winter quarters before hard freezing weather.

D. J. Hawley winters bees in a good cellar, without any special ventilation except from the bottom of the hive. Does not think ventilation from the top of the hive advisable, as it is essential to keep up the animal heat in the hive. Rarified air caused by animal heat will ascend to the top of the hive, while all the foul gases will descend to the bottom of the hive. Hence, the necessity of bottom ventilation. Where a very large number of colonies are kept in the same cellar, general ventilation is necessary in addition to hive ventilation.

J. H. Peck wintered his bees successfully from the instructions he received from the Hon. Lewis Wallbridge (now Chief Justice of Manitoba), from whom he obtained his bees. Had no ventilation, except from the bottom of the hive. Thinks if bees are put into an ordinary cellar, with at least 30 pounds of honey to each hive, and caps removed, and cushions of sawdust or cotton batting placed on top of the hives, and that where not more than 10 or 12 colonies are placed in the same cellar, that cellar ventilation is not absolutely necessary, but perhaps advisable. His bees were housed, last year, 150 days,

or 5 months and 9 days. This is a very long period to feed bees, but if the temperature can be kept up and bees have a good supply of pure honey, the loss by this method of wintering bees will be comparatively small.

#### SUN AND SHADE FOR BEES.

W. C. Wells prefers apple trees as shade for his bee hives in very hot weather.

C. W. Post prefers fruit trees and grape vines for bee shade.

J. G. A. Wallace preferred large Missouri currant bushes as bee shade. He had been very successful in that way.

S. Powell preferred large board caps placed on the top of the hive 6 or 8 in. larger each way, than the top of the hive. This afforded ample protection against the rays of the sun, and prevented the melting of honey in the sections.

#### INCREASE OF BEES IN THE SPRING.

W. C. Wells and C. W. Post agreed that the best plan to get a large increase of bees, was to spread the brood frames by removing the division boards and inserting empty cards of combs as fast as the bees are able to cover them. Care should be taken not to spread the brood too fast, as a cold night might chill the brood and produce foul brood.

#### THE BEST TIME TO TRANSFER BEES.

J. G. A. Wallace prefers the spring when apple trees are in blossom. Messrs. Dempsey, Wells, Post, Hawley and Powell all concurred in the view.

Question by Mr. J. H. Peck,—"Which is the best hive for all purposes, a one or two-story hive?" All agreed that a two-story hive was best for all purposes, for the following reasons:

1. All surplus honey, as a rule, was stored in the upper story and the brood-chamber below.

2. The honey above is clearer and free from brood, and can be extracted without injury to the brood, and is more accessible, the lower chamber being left almost entirely for brood, and comb honey is cleaner, as the bees do not travel over it in passing out of the hive.

#### COMB HONEY, WITH OR WITHOUT SEPARATORS.

Mr. Wallace was of the opinion that he could get more honey without separators.

Mr. Hawley had tried both plans during the past season, and obtained as much comb honey with separators as without. By the use of the separators his comb honey was in much better condition for shipping in the usual size crates than without separators; about one-eighth of the comb boxes were bulged out with honey, and could not be sent out in the usual sized shipping crates.

#### THE BEST RACE OF BEES.

Mr. Post thought the Italians were the best kind of bees, had destroyed

his Cyprian and Syrian queens in consequence of their stinging propensities, and kept none but Italians.

Mr. Dempsey did not like Syrian bees, they were such ferocious stingers. Was better pleased with Italians and Cyprians.

Mr. Hawley preferred a cross between the Cyprians and the Italians. By this means the excellent working qualities of both races were obtained coupled with the prolificness of the Cyprians.

Mr. Stafford preferred the Italians as a class of bees.

Mr. Peck got his bees as pure Cyprians, but had been informed that they were Italians. They were prolific, and good workers, fighting propensities pointed, but by the aid of a "smoker" had no trouble to manage them.

#### INTRODUCING QUEENS.

Mr. Post makes a cage out of wire netting, an inch and a half wide, 4 inches long, and  $\frac{1}{4}$  of an inch thick, in which he placed a queen and about one dozen working bees, and inserted in the hive between two cards of honey and leave them there for about 48 hours. If the bees are quiet, liberate the queen, and if not quiet in the hive, leave them for 24 hours longer before letting into the hive.

Messrs. Wells and Wallace adopted the same plan.

#### THE BEST HONEY PLANT.

All agreed that basswood is the best honey plant.

#### ARE BEES BENEFICIAL TO FLOWERS?

Mr. Stafford stated that his orchard near his bees bore far more fruit than any of his neighbors, the past season.

Mr. Dempsey said that portion of his orchard near his bees produced a fair crop, while the more remote portions bore no fruit worth speaking of. All said that bees were beneficial to flowers.

#### THE BEST PLACE FOR MARKETING HONEY.

It was agreed that Toronto and Western Ontario afforded the best market for honey, as the people of the Province of Quebec did not consume as much honey in proportion to the population as the people of Ontario.

H. G. Stafford had an average of 190 pounds of extracted honey from each old colony, and an increase of 3 swarms from each old colony, this being the largest yield reported.

The number of colonies represented at the meeting was 1,003. The total number of pounds was 54,000, being a fraction less than 55 pounds per colony. It must be borne in mind that average is based upon the count at the close of the season, and most of our bee-keepers are working to increase their colonies of bees instead of for surplus honey.

W. C. Wells, seconded by H. G. Stafford, moved that the next regular meeting be held in the city of Belleville during the month of February next. Carried.

For the American Bee Journal.

#### Pollen and Dysentery.

W. Z. HUTCHINSON.

Away back in Vol. I, of the AMERICAN BEE JOURNAL, on page 253, I find the following "Analysis of the Excreta of Bees," by Donhoff.

1. "Remains of Pollen." I boiled the excrement in caustic potash lye slightly diluted. After filtering, I washed the residuum in hot dilute muriatic acid. What was left after again filtering, could from its insolubility, be only the remains of pollen. It appeared, under the microscope, like an indistinct granular mass.

2. "Uric Acid." I immersed the excrement in concentrated sulphuric acid, in which uric acid remains undecomposed. After carefully decanting the liquid from the resulting carbonaceous mass, I added water; and then washed the precipitated matter in water. I now added one drop of liquor ammoniaci, and one drop of muriatic acid. On heating, the mass assumed a purplish hue—the characteristic reaction of uric acid.

3. "Hippuric Acid." I boiled some excrement in caustic potash lye. After filtering, I added dilute muriatic acid; and obtained a precipitate which proved to be composed of uric and hippuric acid.

According to an approximative estimate, the excreta of bees consists of about one-third uric and hippuric acid, and the residue of indigestible portions of pollen."

Now, dysentery or bee-choera is simply an overloaded condition of the intestinal canal, with no opportunity of flying in the open air to discharge feces; and if this fecal matter is two-thirds pollen, is it not a logical conclusion that the more pollen there is consumed, the sooner will the intestines become overloaded?

Last winter I had colonies die with dysentery, in its worst form, early in January, before a particle of brood had been reared; hence, it certainly was not brood rearing that caused it; and if the fecal matter discharged by the bees is two-thirds pollen, those colonies certainly consumed large quantities of pollen at a time when no brood was being reared. I also had some colonies the same season that were given empty combs in the fall containing no pollen, and were then fed a syrup made from pure cane sugar, and when the bees from these colonies flew, they discharged so little fecal matter that it was scarcely noticeable, and some of them were kept in the cellar, without a flight, all winter. Thirty-two colonies were buried in a clamp, the same season, and all, except those having sugar stores, suffered, and some died from dysentery. When taken out in April, no brood had yet been reared, but a few colonies had fresh laid eggs.

Rogersville, Mich., Dec. 3, 1883.

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.

For the American Bee Journal.

### Sending Queens by Mail.

FRANK BENTON.

The communication on the above subject, on page 511 of the AMERICAN BEE JOURNAL for Oct. 17, conveys the idea that "the first live queen that ever crossed the Atlantic" by mail, was the one sent Aug. 2, by Mr. G. M. Doolittle. The following is verbatim from a letter in my possession. Notice the date.

"BEETON, July 6, 1883.—MR. FRANK BENTON, Munich, Germany.—Dear Sir: We received a queen from you in a mailing-cage. Most of the bees were dead. I think there must have been at least double as many bees as could get food and water. The live ones were in fine condition... Too many bees are worse than not having enough. I have instructed the boys to send you a cage of bees, and you can report....

With kind regards to Mrs. Benton and yourself. Yours very truly,  
D. A. JONES."

The queen above referred to was an imported Syrian, mailed here during the month of June. She had previously stood a long journey *by mail*, having been prepared according to my instructions in Beyroot, Syria, and had come via Alexandria and Trieste to Munich, a distance of about 2,500 miles, part of which is in a sub-tropical climate, very trying to bees in confinement. About 30 workers were sent with the queen; an experience of several years in sending queens by mail on sea-voyages of 2,000 to 3,000 miles having convinced me that more than 20 workers give better results than a smaller number.

The food was pure sugar candy. The water was in a tin bottle, having a pin-hole, the latter made in the middle of solder to prevent its closing with rust. The cage itself was a strip of pine  $5\frac{1}{2}$  inches long,  $1\frac{1}{2}$  wide, and  $1\frac{1}{8}$  thick, containing three auger holes  $1\frac{1}{4}$  inches each in diameter, the bottom of each being left about  $\frac{1}{8}$  of an inch thick. The middle hole, which contained the bees, had several small air holes on each side. The candy was in one end, and the water bottle in the other. A wire-cloth and a card covered the open side.

This cage was illustrated in the *British Bee Journal* for July 1880, and a comparison shows that Mr. Doolittle's cage does not differ in any essential point, though he did not choose to supply water, and used a different kind of food.

The queen I sent went from Bavaria (after the long journey from the East) to the western part of Canada, and could not have been less than 16 or 17 days on the way. I had previously sent queens by mail from Cyprus and Syria to various parts of Europe, some of which were even 14 days—the time Mr. Doolittle's was on the way to Scotland—and since then I have a good many letters from parties in the United States, telling me of the safe arrival of queens that had been 18, and

and others 19 days on the way by mail; one even that states a queen which was 21 days on the way, "arrived in fine condition, but two of the workers dead."

Thus it is seen that, so far as is now known, the first queen that ever crossed the Atlantic by mail alive did not come from America to the Old World, but went from this side of the water, westward. I have spent too much time, and lost too many queens in testing this matter to resign quietly the claim of having sent out the first queen that ever crossed the Atlantic alive by mail, though Mr. Doolittle and Mr. Cameron doubtless supposed, at the time they wrote, that theirs was really the first.

Munich, Germany, Nov. 8, 1883.

For the American Bee Journal.

### Bee-Keeping in Cuba.

A. W. OSBURN.

As the sun was hiding itself behind the far-off western horizon on the 18th of last month, we dropped our anchor in the snug little harbor at Havana, and the staunch sea-craft, the steamship Niagara was at rest. Night shut down upon us, for the first time, in a tropical country.

We left New York on the 13th with 100 colonies of bees, with a complete outfit to begin bee-keeping in Cuba. J. and P. Casanova furnishing the capital for the outfit, myself to furnish what assistance I could to place the enterprise on a working basis, and it is to be the first apiary established on this island, managed after the modern American style.

Our bees stood the voyage well, although they were rolled and tumbled for five days and nights, and many times had more than they wanted of salt water, for they were stored on the second deck, and when the old ship could no longer stand erect, she would lay over on her side for a rest; then the bees would be compelled to take a bath whether they wished it or not.

On the 20th we arrived at this place, and were able to release our bees. All were alive but 3 colonies; in three days more, five empty hives were placed with the three first, making 8 colonies dead, and 92 alive to start off in this land where flowers are so plenty, where the sunshine is perpetual, and where the withering blight of drouth never comes, or Jack Frost makes his appearance.

Although I have been here over a month, I am not able to tell your readers much about the honey flow, only that from the moment the bees were released, there has been no dearth of honey, and, in fact, it would seem there was too much honey, for the bees are literally running the queens out of the hives; as fast as a young bee hatches, they fill the cell with honey. I do not know that the queens fully realize that in November they are expected to keep their hives full of brood. But the bees are getting sick of this kind of work, and are superseding many of the queens.

The old Cubians tell us that this honey flow begins the first of this month, and lasts until February or the first of March (only think of the best honey flow coming in winter and lasting all winter). To you, in the North, it will seem like a dream, when you are huddling around your hard coal stoves to keep warm, and your bees are either chaff-packed outdoors, or stowed away in some underground cellar to keep them from freezing, you can hardly realize that here in Cuba we have our bees under sheds to protect them from the sun, and every evidence points towards success for the busy little workers.

I am not telling anything that in a few months I shall have to take back. There is one thing I will say, that from what I have seen already, I think the bee-keeper will never see honey flow in Cuba as it flows in the North and in California some times; but still it may. Since I have been here, I think the bees have got the most of the honey from the palm-tree, and they tell us it is in bloom the year around. But at this time they say the "boss" honey plant is opening—that is what they call the bell-flower. It yields honey (they say) in great quantities, and of a rich and delicious flavor. So far, the honey I have tasted has been of fine quality, but a little dark; then, again, some of it is white and clear, and to my taste superior to white clover or basswood.

You probably know the prejudice there is in the Northern markets against the honey that has formerly been shipped from this country, and no wonder, they keep their bees in hollow logs, and when they wish to take surplus, they take long knives (the log is open at either end) and cut the honey out—honey, brood, pollen and all—then the honey is squeezed out, and the remainder made into wax. You can easily imagine how the honey looks, and what the flavor would be under such treatment.

The native bee of Cuba is a Simon pure black; there is no German or half-breed about them. But even with the black bees, and their primitive way of handling them, the time was before the war here in Cuba, when they had lots of honey in this primitive way, and it is reported that in the lower end of the Island, one man kept 20,000 colonies, and at the commencement of the war, he sold his bees for \$200,000 in gold. I gave you the above as it was repeated to me, not vouching for its truth. But it is not impossible, in a country where you can breed bees at any time of the year, and where there is no time that they do not get a good living.

During the winter months, they tell me, that it is not uncommon for them to take 15 gallons of honey (which would be about 180 pounds) every 15 days. They "rob" them, and of course, the bees have new comb to build every time. If they do that, Cuba is not so slow a honey country, and what might we expect when managed in the movable frame hives, and the extractor used to throw the honey out.

One word about the face of the country; 'tis simply beautiful, 'tis grand beyond description, rolling and undulating plains, with small brooks and creeks whose banks are thickly studded over with tropical trees, chief among them is the beautiful palm, and the honey plant or tree. The climate is all any one could wish. This section, the Casanova estate, is high and healthful. Yellow fever is seldom if ever known here. In future letters I will report progress as it is developed.

San Miguel, de Jruco, Cuba, West Indies, Nov. 25, 1883.

For the American Bee Journal.

#### A Premium List for Bees and Honey.

O. CLUTE.

A good premium list for bees, honey, and bee-keeping implements, which, with necessary local modifications, would serve for state fairs, and other large fairs, ought to be prepared by some of our most experienced bee-keepers. Such a list, carefully prepared, would need only slight modifications for many years, and would serve as a guide to the executive committees of many fairs.

Such a list would help much towards the improvement of bee-keeping all over the country. It would tend to the discouragement of poor methods and poor products, and to the encouragement of good ones. In order to have it of service for next year, such a list ought to be prepared very soon, for the executive committees of most of the state fairs meet sometime in January of each year, and then adopt the premium list for the next fair.

I attended the meeting of the executive committee of the Iowa State Agricultural Society, at its winter meeting in Des Moines, last January, and was courteously asked to prepare a premium list. I did prepare one which was adopted without change, and served very well for the fair last September. I am now requested to prepare a list for submission to the board at its meeting, about the middle of January, 1884. I should like to make the list as acceptable as possible to the majority of Iowa bee-keepers, but I have no way of consulting with them except through the columns of the BEE JOURNAL. I therefore ask the JOURNAL to publish the subjoined list now, in order that it may be read by enterprising bee-keepers in Iowa and other states, in time for them to send me their suggestions and criticisms for its improvement.

All bee-keepers are invited to send to me direct, or to Mr. Newman, for publication in the BEE JOURNAL, if he does not object, their thoughts as to the best premium list. It would be especially profitable if we could hear from Rev. L. L. Langstroth, Mr. W. Z. Hutchinson, Mr. O. O. Poppleton, Prof. Cook, Mr. Doolittle, and other successful bee-keepers. This list has been prepared on a basis of an aggregate amount of \$300 for premiums. I have put comb honey and extracted honey on a par; have classi-

fied honey into "white clover," "linden," and "fall flowers," and have put them all on a par, because there are some sections of the West where the fall honey is the main crop.

In bees, I have offered the highest premium on Italians; have put Syrians and Cyprians on a par, and offered premiums half as great; have offered nothing on blacks. No premiums are offered in this list for the manipulation of bees on the ground, because I am not sure we can have a suitable building. I wish, however, that some of the friends would suggest what such premiums ought to be.

I expect that some of the bee-keepers will criticise my list pretty sharply. Well, friends, pitch in and tear my list all to pieces, on condition that you suggest a better one. What I am after is the best list. I am quite willing that this list of mine shall be knocked into splinters, if from its ruins can be evolved the perfect list. So do not spare your suggestions.

	First Prem.	Second Prem.
Best Ital'n. bees in observatory hive.	\$10.00	5.00
Best Cyp. bees in observatory hive.	5.00	2.50
Best Syrian (or holy land) bees in observatory hive.	5.00	2.50
Best and largest display of different races of bees.	15.00	10.00
Best comb honey, white clover, not less than 20 lbs.	10.00	\$100
Best comb honey, linden, not less than 20 lbs.	10.00	5.00
Best comb honey, fall flowers, not less than 20 lbs.	10.00	5.00
Best and largest display of comb honey.	15.00	10.00
Best extracted honey, white clover, not less than 20 lbs.	10.00	5.00
Best extracted honey, linden, not less than 20 lbs.	10.00	5.00
Best extracted honey, fall flowers, not less than 20 lbs.	10.00	5.00
Best and largest display of extracted honey.	15.00	10.00
Best collection of honey plants, prepared, mounted, and correctly labeled.	10.00	5.00
Best collection honey plants growing in pots and correctly labeled.	10.00	5.00
Best comb foundation machine, shown in operation.	10.00	5.00
Best comb fdn. for brood combs.	2.00	1.00
Best comb fdn. for surplus honey.	2.00	1.00
Best honey extractor.	3.00	1.00
Best smoker.	1.00	.50
Best hive for comb honey.	2.00	1.00
Best hive for extracted honey.	2.00	1.00
Best hive for out-door wintering.	2.00	1.00
Best product, extracted honey, from one colony of bees and its increase for the year.	10.00	5.00
Best product, comb honey, from one colony of bees and its increase for the year.	10.00	5.00
Best method of obtaining comb honey, shown by receptacles in place on the hive.	5.00	2.50

O. CLUTE,  
Pres. Iowa Bee-Keepers' Ass'n.  
Iowa City, Iowa, Dec. 5, 1883.

There will be a meeting of the members of the Piatt County Bee-Keepers' Association, at the office of the Secretary in Monticello, Ill., on Saturday, Dec. 15, 1883, at 10 a. m.

A. T. PIPHER, Sec.

The Bee-Keepers' Association of Central Illinois, will meet in Bloomington, on Jan. 9, 1884. All are cordially invited to attend.

JAS. POINDEXTER, Sec.

Please give notice, through the BEE JOURNAL, that C. F. Muth, of Cincinnati, and A. I. Root, of Medina, will be at the Ohio Bee-Keepers' Convention, which will be held in Columbus, on Jan. 14, 15 and 16, and join in the discussions of various subjects interesting to bee-keepers.

C. M. KINGSBURY, Sec.

The annual meeting of the Cortland Union Bee-Keepers' Association will be held in Cortland, N. Y., on Tuesday, Jan. 8, 1884.

M. C. BEAN, Sec.  
McGrawville, N. Y., Nov. 23, 1883.

The Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association, will hold its annual meeting in Temperance Hall, Freeport, Ill., on Jan. 15 and 16, 1884.

J. STEWART, Sec.  
Rock City, Ill., Nov. 30, 1883.



#### Syrian Bees, etc.

In a recent article, Mr. W. Z. Hutchinson said of these bees: "Their admirers tell us, if we use them properly, they will be gentle." I extracted 900 lbs. of honey in one day from them, and did not get a sting, and the only smoker I used was a roll of cotton rags. Can Mr. H. do better with hybrid-Italians? They do ripen their honey well; if any one doubts it, I will send him some honey to prove it. I deny that they will "rear brood as long as there is a drop of honey in the hive." I weighed several of my hives this fall, after they had stopped breeding, and they had from 35 to 40 lbs. of honey in them. Two years ago I had an Italian colony that had cast a large swarm, and was ready to swarm again. The queens were piping. I opened the hive to cut out the queen-cells; I smoked them some. They became so irritated, that half of the colony were after me. I threw down my tools and ran for the woods. In doing so, I ran against a tree and skinned my nose. Talk about "irritable" bees; the Syrians are peaceable by the side of such bees. We have no snow yet, and it is warm and summer like.

Cokato, Minn. FAYETTE LEE.

#### My Report for 1883.

As I did not make a spring report, perhaps it would not be out of place now. The spring found me with 14 colonies, out of the 18 put in the cellar on Nov. 15, 1882. They all had the dysentery, but when I took them out of the cellar on April 15, 1883. In the spring I traded for one; that made me 15 to start with. The spring started favorably. On May 21 it turned cold and wet, and so continued till the last of June. I extracted in June and July. June 19, 45 lbs.; June 20, 51 lbs.; June 29, 106 lbs.; July 7, 176 lbs.; July 10, 100 lbs.; July 18, 122 lbs.; July 19, 163 lbs.; July 29, 51 lbs.; Sept. 3, 123 lbs.; making a total of 937 lbs., and had 286 lbs. of comb honey. They increased to 35, and all are in good condition. I put them in the cellar on Nov. 20. I sold all of my honey at home at 12 cents for extracted, and 17 cents to 20 cents for comb. I have on hand about 200 lbs. of honey. DAVID K. KNOLL. Salamonia, Ind., Dec. 6, 1883.

**Foul Brood.**

By request of Wm. B. McCormick, Uniontown, Pa., I give the results through the BEE JOURNAL of an examination of a piece of comb honey sent by him. He says that, last spring, he noticed something which he called chilled brood, in one or more of his hives, but as the trouble seemed to continue during the summer, he concluded the difficulty was due to foul brood. He says: "I lost, last summer, about 20 colonies by it, several just leaving their hives, comb, honey and all, and going off, or trying to get into some other hive. Nearly all the bees in the county seem to be more or less affected in the same way.

\*\*\* A. M. Hewit, some 12 miles from here, told me he lost every one of his 70 colonies. An affected colony will not work, but lay around idle, and will sometimes kill their queen." Mr. McCormick thinks only the black bees are thus affected; the Italians not suffering. Now, after the closest investigation, I find nothing of the micro-organism to which we suppose foul brood is due. There are, in the comb cells, both living and dead larvae; but the dead ones look altogether different from those killed with the disease called foul brood; their original shape is more nearly retained, the fluids of the body are much more watery—notropy when pulled out—and the odor, though somewhat disagreeable, is characteristically different. What the trouble is I cannot say; but foul brood is not present in the sample received.

Champaign, Ill. T. J. BURRILL.

**A Cold, Wet Season.**

I commenced the honey season with 50 colonies, but a good many being weak, as we had such a cold and wet spring, they dwindled badly. I had a good flow of honey from white clover, but that was all. I think this was the coldest and wettest summer I ever knew. I now have 88 colonies in winter quarters, in good condition. I have taken 4,023 lbs. of extracted honey, and 950 lbs. of comb honey, and the bees have plenty to winter on.

H. J. SMITH.

Burlington, Wis., Nov. 30, 1883.

**My Report for the Year.**

On Nov. 20, 1882, I put into winter quarters 16 colonies, in 10-frame Langstroth hives, except a weak one in a 6-frame hive, which starved before spring. Last April I bought 4 colonies, in box hives, making 19 to start this season with. I transferred the four 21 days after the first swarm issued. Honey from the apple bloom was light, owing to the cold, wet weather last spring. I got about half a crop of honey from white clover. The basswood crop was heavy; then came a drought, followed by an early frost, which made our fall crop light. I took a little over 2,000 pounds of honey, this season (525 being extracted and 1,500 pounds in the comb), nearly all in one-pound sections. My bees increased to 50 colonies. I doubled up some that were weak, and now have 47 packed as last winter, in a

low shed facing the south, covered on top, back and ends with dirt and sod. I pack my hives close together with some straw and chaff over and behind them. When cold weather sets in, I put up a door in front of them, which I can let down in front on days suitable for them to fly out. The brown German bees gave larger yields of honey than the Italians. I use what some of our advanced apiarists call rattle-traps; that is an outside cover over my section racks, which I find a great advantage in keeping the hot sun from them; they are also an advantage in cool nights. Oh, yes, I use an inch strip of glass in each side of my section-rack, which saves a great deal of time, peeking in at the top, when I have them tiered up 2 and 3 sections deep. I have no trouble in getting my honey sealed over next to the glass.

R. A. CALVIN.  
Hartford, Mich., Dec. 3, 1883.

**Italians and Hybrids.**

I commenced last spring's work with 10 colonies of bees; they increased to 23, and I bought 8 extra colonies this fall, which make a good stock to start with next spring. Last winter I wintered 2 colonies in a very damp vapory cellar with the thermometer averaging from 40° to 45° Fahr. I gave them lower ventilation about 2 square inches in each hive; one colony was an Italian, and the other a hybrid. The hybrids kept up a continual hum all winter, but the Italians remained as still as death. When I thumped the hive they responded with a sharp hum; then all would be quiet in half a minute. But the hybrids consumed about double the honey that the Italians did, and the colonies were about equal in numbers. The hybrids were in a Quinby hive, while the others were in a Langstroth hive, and they both came out healthy in the spring. The only reason I can give for the extra amount of honey consumed by the hybrids is, that they were not in as warm a hive as the Italians, which was made of inch lumber, while the Quinby hive was made of half-inch lumber.

CHARLES NORRIS.

Traverse City, Mich., Nov. 28, 1883.

**My Favorite Feeder, etc.**

The feeder I use is, essentially, a broad frame with boards at the sides extending to within an inch of the top, with bottom and sides made watertight. The end pieces are of inch boards; the sides, bottom and top are of one-half-inch plank undressed, and just as left by the saw. I make the joints water-tight by a layer of white lead, spread in before nailing together. The feeder is just the size and shape of an ordinary broad frame, and holds about one gallon of syrup. It hangs in the hive just as an ordinary frame. In it I place a float made one-half inch smaller than the inside of the feeder; it is simply a section box strip, trimmed, till it floats loosely in the feeder. I fill this, hang it in the hive, and the feeding is done, with no drowned bees, and not the slightest danger of robbing. I began the season

with 11 colonies; I used 4 of them for experiments and queen rearing. The remaining seven were run for comb honey, of which I obtained 560 lbs.; 450 from white clover, a few pounds from linden, and the rest fall honey from various sources. I have sold \$75 worth of bees and queens, and have 29 colonies remaining, as the result of the years' increase. I had to feed a few of my queen-rearing colonies; the rest had plenty of stores.

L. C. JOHNSON.  
Fountain City, Ind., Dec. 3, 1883.

**Ten Dollars a Colony net Profit.**

I commenced the season with 20 colonies of black bees, increased to 57, and obtained \$180 worth of comb and extracted honey, besides selling 12 colonies at \$5 each. The receipts were:

Honey.....	\$180 00
Bees.....	60 00
Total,.....	240 00
Expense for extractor.....	\$11 50
Foundation.....	8 40
Lumber.....	20 00
Total,.....	39 90

Leaving a net profit of \$200.

W. G. HAYEN.  
Pleasant Mound, Ill., Dec. 3, 1883.

**Bee Meeting at Fayette, Iowa.**

Our bee-keepers' meeting held at Fayette, Iowa, was quite well attended, and considerable interest manifested, and an organization effected. A. H. Loomis, of Clermont, President; V. Whiting, of Waucoma, Vice-President; B. F. Little, of Brush Creek, Secretary; and H. Randall, of Randalia, Treasurer. We adopted a constitution and by-laws. There were hives, honey, both comb and extracted, extractors, foundation machines, smokers, uncapping knives, etc., etc., on exhibition; all of which attracted much attention, and elicited considerable discussion. All in all, we felt as though it was a most interesting and profitable meeting, and I think we have established it upon a pretty sure foundation. Of course it was but a beginning, and somewhat crude, but we hope to improve with age, and be enable sometime to call in outsiders, practical apiarists, to discuss the pros and cons with us, and address the meeting on "The Blessed Bees." Most of our bees hereabouts go into winter quarters in a weak condition. The long cold fall, without any bee pasturage, leaves them in a bad condition to hope for strong colonies next spring.

A. H. LOOMIS.  
Clermont, Iowa, Nov. 24, 1883.

**More Honey than I Expected.**

The weather has been beautiful for the past few weeks, very much like spring; bees flying quite often, and their humming sounds like the busy time of the year. My honey crop was over 1,000 lbs. instead of 600 lbs., for which I am proportionately happy.

B. H. HOLT.  
Adel, Iowa, Dec. 6, 1883.

## Special Notices.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks. American Express money orders for \$5, or less, can be obtained for 5 cents.

We wish to impress upon every one the necessity of being very specific, and carefully to state what they desire for the money sent. Also, if they live near one post office, and get their mail at another, be sure to give us the address we already have on our books.

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We have now published another edition of the pamphlet on "Honey as Food and Medicine," with more new Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

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## Our New List of Premiums.

### Getting up Clubs for 1884.

To increase the number of readers of the BEE JOURNAL, we believe, will aid progressive bee-culture and help to elevate the pursuit. We, therefore, offer the following premiums for getting up clubs:

While no subscription to the BEE JOURNAL will be taken for less than the regular advertised prices (viz.: Weekly, \$2.00; Monthly, \$1.00),—any one getting up a club of two copies, or more, may select from "OUR BOOK LIST" anything therein named, to the amount of 15 cents for every dollar *they send direct to this office*, to pay them for the trouble of getting up the club; and these books will be sent, postpaid, to any address desired.

For a club of 3 Weekly or 6 Monthly and \$6.00, we will make an *additional* present of a Pocket Dictionary, bound in cloth, containing 320 pages.

For a club of 5 Weekly or 10 Monthly, (or a mixed club of both,) with \$10, we will, in addition to the 15 per cent, present a copy of the AMERICAN "POPULAR" DICTIONARY, comprising every word in the English language that enters into speech or writing; it contains 32,000 words and phrases, 670 illustrations and 512 pages; it is nicely bound in cloth, and will be sent by mail, postpaid, to any address desired.

For a club of \$20, for 10 Weeklies, or an equivalent in Monthlies, we will present, besides the 15 per cent. in books, a tested Italian queen, by mail, postpaid.

Subscriptions for two or more years for one person, will count the same as each year for a different person.

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A correspondent asks if any one may select a Binder for the BEE JOURNAL, among the books given as Premiums for getting subscribers we reply, yes; any book or binder we keep for sale, may be selected by those who get up clubs.

To all *new* subscribers for the Weekly BEE JOURNAL who send us \$2.00 for 1884, we will send the remainder of this year *free*, from the time the subscription is received. So, the sooner they subscribe, the more numbers they will get *free*.

#### Advertisers' Opinion.

The queen business is *rushing*, and we think the BEE JOURNAL deserves much credit as an advertising medium.

E. A. THOMAS & CO.,  
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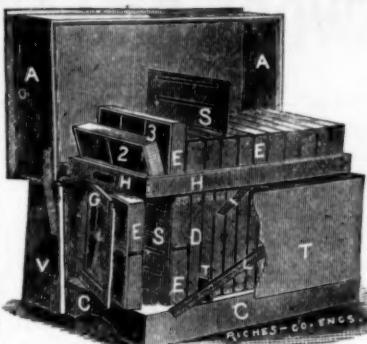
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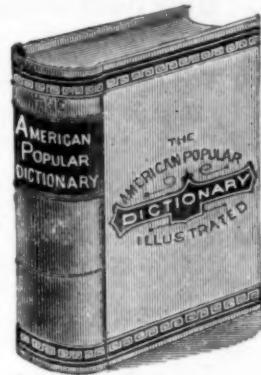
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